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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,780	01/02/2002	Michel Moulin	58575-277955	3998
7590	01/25/2005		EXAMINER HINZE, LEO T	
Paul W. Busse Faegre & Benson, LLP 2200 Wells Fargo Center 90 South Seventh Street Minneapolis, MN 55401-3901			ART UNIT 2854	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/913,780

Applicant(s)

MOULIN, MICHEL

Examiner

Leo T. Hinze

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,47 and 82-110 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 85 and 86 is/are allowed.
- 6) ☒ Claim(s) 1,47,82,87-89,91-95 and 97-110 is/are rejected.
- 7) ☒ Claim(s) 83,84,90 and 96 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 47, 87-89, 91-95 and 97-110 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landsman, US 4,764,815 (Landsman) in view of Bergling, US 4,015,702 (Bergling).

a. Regarding claim 1:

Landsman teaches a flat bed platesetter system for imaging radiant energy onto a printing plate (col. 1, lines 7-9), the system comprising: a supporting bed (26, 28, Fig. 1); drive means for engaging the printing plate in contact with the support bed and (30, 32, Fig. 2) sliding ("slidably supported", col. 5, line 35) the printing plate and the support bed in a direction of movement and; an optical head (12, Fig. 1) movably mounted on a stationary bridge (14, 14a, Fig. 1), adapted to move across the direction of movement of the printing plate ("moves transversely across ... the surface to be scanned", col. 3, lines 14-15) and being provided for emitting radiant energy onto the printing plate (col. 3, lines 5-12).

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Landsman does not teach: a stationary supporting bed; drive means for sliding the printing plate on the support bed in a direction of movement.

Bergling teaches a method and apparatus for conveying flat plates, including: a stationary support bed of a plurality of rollers (2, Fig. 1; “plurality of wheels to support the plates during their transport,” col. 1, lines 65-66); a drive means (5, 6, 14, Figs. 2 and 4) for engaging the printing plate in direct contact with the stationary support bed (Fig. 2); the grippers are laterally and longitudinally adjustable (col. 3, lines 17-20).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Landsman to replace the reference and primary platens with the stationary support bed and grippers of Bergling, because Bergling teaches that such a system allows adjustability for various plate sizes, which would increase the utility of the apparatus. One having ordinary skill in the art would also recognize the advantage of less moving mass with the gripper system of Bergling, which could lead to lower energy requirements and more precise control over a drive means with a larger mass.

b. Regarding claim 47:

Landsman teaches: a flat bed platesetter system for imaging radiant energy onto a printing plate (col. 1, lines 7-9), the system comprising: a supporting bed (26, 28, Fig. 1); a carriage for engaging the printing plate in direct contact with the stationary support bed and (30, 32, Fig. 2) sliding (“slidably supported”, col. 5, line 35) the printing plate and the support bed in a direction of movement and; an optical head (12, Fig. 1) movably mounted on a stationary bridge (14, 14a, Fig. 1), adapted to move across the direction of movement of the printing plate (“moves transversely across... the surface to be

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scanned”, col. 3, lines 14-15) and being provided for emitting radiant energy onto the printing plate (col. 3, lines 5-12);

Landsman does not teach: a stationary supporting bed (3, Fig. 1); a carriage (2, Fig. 1) for sliding the load on the support bed.

Bergling teaches a method and apparatus for conveying flat plates, including: a stationary support bed of a plurality of rollers (2, Fig. 1; “plurality of wheels to support the plates during their transport,” col. 1, lines 65-66); a carriage (5, 6, 14, Figs. 2 and 4) for engaging the printing plate in direct contact with the stationary support bed (Fig. 2); the grippers are laterally and longitudinally adjustable (col. 3, lines 17-20).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Landsman to replace the reference and primary platens with the stationary support bed and grippers of Bergling, because Bergling teaches that such a system allows adjustability for various plate sizes, which would increase the utility of the apparatus. One having ordinary skill in the art would also recognize the advantage of less moving mass with the gripper system of Bergling, which could lead to lower energy requirements and more precise control over a drive means with a larger mass.

c. Regarding claim 87:

Landsman teaches: a method for imaging a printing plate with radiant energy (col. 1, lines 7-9) in a flat bed platesetter, the method comprising: (a) providing a flat bed platesetter having a support area, (b) disposing a printing plate on, and in direct contact with, the support area; (c) positioning the printing plate on the support bed; (d) sliding the printing plate in a first direction; and (e) moving a

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radiant energy emitting head in a second direction substantially perpendicular to the first direction to provide an image on the printing plate (col. 3, line 5 through col. 4, line 37).

Landsman does not teach a stationary support area, (b) disposing a printing plate in direct contact with the stationary support area.

Bergling teaches a method and apparatus for conveying flat plates, including: a stationary support bed of a plurality of rollers (2, Fig. 1); disposing a printing plate in direct contact with the stationary support area ("plurality of wheels to support the plates during their transport," col. 1, lines 65-66); the grippers (5, 6, Fig. 2) are laterally and longitudinally adjustable (col. 3, lines 17-20).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Landsman to replace the reference and primary platens with the stationary support bed and grippers of Bergling, because Bergling teaches that such a system allows adjustability for various plate sizes, which would increase the utility of the apparatus. One having ordinary skill in the art would also recognize the advantage of less moving mass with the gripper system of Bergling, which could lead to lower energy requirements and more precise control over a drive means with a larger mass.

d. Regarding claim 88, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claim 1 above. Bergling also teaches wherein the stationary support bed comprises a field of roller bearings extending the length of the device (plurality of rollers 2, Fig. 2).

e. Regarding claim 89, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claim 47 above. Bergling also teaches wherein the carriage is configured

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to hold the printing plate from underneath as the carriage slides the printing plate on the stationary support bed (grippers 5, 6 grip the top and bottom of the plate, Fig. 2).

f. Regarding claim 91, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claim 47 above. Bergling also teaches a carriage (5, 6, Fig. 2) that is substantially narrower than the width of the plate across the direction of movement of the printing plate (8, Fig. 2).

g. Regarding claim 92, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claim 87 above. Bergling also teaches a carriage (5, 6, Fig. 2) that is substantially narrower than the width of the plate across the direction of movement of the printing plate (8, Fig. 2).

h. Regarding claim 93, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claim 87 above. Landsman also teaches wherein the step of moving the radiant energy emitting head comprises moving an optical head, on which the radiant energy emitting head is mounted, on a stationary bridge across the direction of movement of the printing plate (col. 3, line 5 through col. 4, line 37).

i. Regarding claim 94:

Landsman teaches a platesetter system for imaging radiant energy onto a printing plate (col. 1, lines 7-9), the system comprising: a support bed (26, 28, Fig. 1) sufficiently large to receive and support the printing plate; drive means (30, 32, Fig. 2) for sliding the printing plate in a direction of movement; an optical head (12, Fig. 1) movably mounted on a stationary bridge (14, 14a, Fig. 1) and adapted to move across the direction of movement of the printing plate ("moves transversely across...

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the surface to be scanned”, col. 3, lines 14-15), the optical head being adapted to emit radiant energy onto the printing plate (col. 3, lines 5-12)

Landsman does not teach: a support bed comprising a stationary support surface to directly support the printing plate with one face of the printing plate in sliding contact with the support surface; and a plurality of bearings configured to maintain a portion of the printing plate at a predetermined distance from the optical head.

Bergling teaches a method and apparatus for conveying flat plates, including: a stationary support bed of a plurality of rollers (2, Fig. 1; “plurality of wheels to support the plates during their transport,” col. 1, lines 65-66); a drive means (5, 6, 14, Figs. 2 and 4) for engaging the printing plate in direct contact with the stationary support bed (Fig. 2); the grippers are laterally and longitudinally adjustable (col. 3, lines 17-20); the stationary support bed comprises a field of roller bearings extending the length of the device (plurality of rollers 2, Fig. 2) that maintain a portion of the printing plate at a predetermined distance from the optical head.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Landsman to replace the reference and primary platens with the stationary support bed and grippers of Bergling, because Bergling teaches that such a system allows adjustability for various plate sizes, which would increase the utility of the apparatus. One having ordinary skill in the art would also recognize the advantage of less moving mass with the gripper system of Bergling, which could lead to lower energy requirements and more precise control over a drive means with a larger mass.

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j. Regarding claim 95, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claim 94 above. Landsman also teaches where the optical head is adapted to focus the radiant energy onto a focus plane ("automatic focusing system," col. 13, line 21). Bergling also teaches the plurality of bearings are configured to maintain the portion of the printing plate in the focus plane ("plurality of wheels to support the plates," col. 1, lines 65-66).

k. Regarding claim 97, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claim 95 above. Bergling also teaches wherein the plurality of bearing compromise a plurality of rows of precision bearing and corresponding plurality of rows of pressure bearings, the rows of pressure bearings being offset from the corresponding rows of precision bearings (rows of bearings 2 are offset, Fig. 2).

l. Regarding claim 98:

Landsman teaches a platesetter system for imaging radiant energy onto a printing plate, the system comprising: a support bed (30, 32, Fig. 2) having a support field defining a support plane; a carriage (26, 28, Fig. 1) movable across the support field in a direction of movement and having a holder adapted to secure the printing plate to the carriage and maintain the printing plate at a level and in contact with the support bed; and an optical head (12, Fig. 1) movably mounted on a stationary bridge and adapted to move across the direction of movement of the carriage, the optical head comprising emitters for emitting radiant energy onto the printing plate.

Landsman does not teach a carriage that maintains the printing plate at the level of the support plane and in direct contact with the support bed.

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Bergling teaches a method and apparatus for conveying flat plates, including: a carriage (5, 6, 14, Fig. 2) that maintains the printing plate at the level of the support plane and in direct contact with the support bed (2, Fig. 1); the grippers are laterally and longitudinally adjustable (col. 3, lines 17-20).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Landsman to replace the reference and primary platens with the stationary support bed and grippers of Bergling, because Bergling teaches that such a system allows adjustability for various plate sizes, which would increase the utility of the apparatus. One having ordinary skill in the art would also recognize the advantage of less moving mass with the gripper system of Bergling, which could lead to lower energy requirements and more precise control over a drive means with a larger mass.

m. Regarding claims 99, 103, and 107, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claims 98, 1 and 47, respectively, above. Bergling also teaches wherein the carriage is moveable across the support field in a stepwise motion (col. 3, lines 28-47).

n. Regarding claims 100, 104, and 108, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claims 98, 1 and 47, respectively, above. Bergling also teaches wherein the support is adapted to maintain the printing plate at a precise distance from the optical head while the carriage moves the printing plate across the support field ("plurality of wheels to support the plates," col. 1; lines 65-66).

o. Regarding claims 101, 105, and 109, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claims 98, 1 and 47, respectively, above. Bergling also

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teaches wherein the support bed is adapted to maintain the printing plate flat in the support plane (“plurality of wheels to support the plates,” col. 1, lines 65-66).

p. Regarding claims 102, 106, and 110, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claims 98, 1 and 47, respectively, above. Bergling also teaches wherein the carriage is adapted to securely maintain the printing plate in a stationary position (col. 3, lines 28-47).

3. Claim 82 is rejected under 35 U.S.C. 103(a) as being unpatentable over Landsman in view of Bergling as applied to claim 47 above, and further in view of Rinke et al., US 5,934,195 (Rinke).

The combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claim 47 above, including wherein the carriage (Bergling , 5, 6, 14, Fig. 2) has a base (14, Fig. 2) located under a supporting bed with sliding elements (2, Fig. 1).

The combination of Landsman and Bergling does not teach a protruding section carrying suction cups and disposing the suction cups at the level where the printing plate is in direct contact with the stationary support bed.

Rinke teaches an apparatus for and method of exposing printing plates that uses a vacuum platen to secure the printing plate (col. 5, lines 6-32).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Landsman to use a vacuum to secure the plate to the carriage, because one having ordinary skill in the art would recognize that a vacuum gripper system would grip the plate exclusively from the bottom, removing any part of the gripping element from the top surface of the

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plate, and therefore allowing the whole top surface of the plate to be available for radiating by the optical head.

Response to Arguments

4. Applicant's arguments filed 15 November 2004 have been fully considered but they are not persuasive.

5. In response to applicant's argument that Eberhard (US 5,437,360) does not teach the "direct contact" limitation, the examiner disagrees with the applicant's interpretation of Eberhard. Fig. 1 shows an exaggerated representation of the height of the belt 2 in the raised position. Eberhard teaches that the belt 2 is raised only high enough to come into frictional contact with the load for the purpose of moving the load (col. 3, lines 22-25). The load would become unstable if the belt were used to raise the load above the support rollers, as the applicant asserts.

6. In response to applicant's arguments that Bergling does not show the work piece being held in direct contact with the wheels, the examiner disagrees with the applicant's interpretation of Bergling. Bergling teaches that the rollers "support the plates during their transport" (col. 1, lines 65-66). The applicant incorrectly interprets the Bergling's teaching of torque that results from the relationship of the gripping point and the center of gravity (col. 1, lines 15-27).

Allowable Subject Matter

7. Claims 83-84, 90, and 96 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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8. Claims 85-86 are allowed.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is (571) 272-2167. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leo T. Hinze
Patent Examiner
AU 2854
21 January 2005



ANDREW H. HIRSHFELD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800